

## CLAIMS

1. A method for dispensing S-Adenosylmethionine (SAMe) in the form of a dry micro fine powder directly to a human subject by inhalation, said method comprising the steps of:

(a) forming a dry micro fine powder composition comprising S-adenosylmethionine as an active ingredient; and

(b) directly administering the composition to the subject's respiratory tract in a dry micro fine powder form..

2. The method of claim 1 where step (b) comprises the step of dispensing, upon breath activation by the human subject, of an effective amount of the dry micro fine powder SAMe composition directly into the mouth of the subject by a dry powder inhaler to allow said composition to reach the subject's respiratory tract without the use of propellants, chlorinated, halogenated, gas(es), liquids, sprays aerosol(s) or vaporization

3. The method for dispensing of claim 1 wherein said dry micro fine powder composition further consist of a membrane permeation enhancer.

4. The method for dispensing of claim 3 wherein said membrane permeation enhancer is lactose and/or glutathione.

5. The method for dispensing of claim 1 wherein said method allows for delivery into the subject's respiratory tract SAMe, in order to enhance prophylactic and therapeutic effects of the SAMe.

6. The method of claim 1 wherein said dry micro fine powder composition consist of a plurality of particles which are between approximately 0.1 micrometer and approximately 10 micrometer in size.

7. The method of claim 3 wherein said membrane permeation enhancer is magnesium stearate.

8. The method for dispensing of claim 3 wherein said membrane permeation enhancer is lactose and/or one or more water soluble antioxidants.

9. A method for dispensing a SAMe composition in a dry micro fine powder form directly to a human subject with the use of a conventional dry powder inhaler, said method comprising the steps of:

(a) forming a dry micro fine powder SAME composition with or without a membrane permeation enhancer; and

(b) directly administering the composition to the subject's respiratory tract in a dry micro fine powder form.

10. The method of claim 9, wherein step (b) comprises the step of dispensing, upon breath activation by the human subject, of an effective amount of the dry micro fine powder SAME composition directly into the mouth of the subject with the dry powder inhaler to allow said composition to reach the subject's respiratory tract, without the aid or use of propellants, chlorinated, halogenated, gas(es), liquids, spray, aerosol(s) or vaporization.

11. The method for dispensing of claim 9 wherein said method allows for delivery of a SAME composition into the subject's respiratory tract in order to enhance prophylactic and therapeutic effects of said SAME.

12. The method for dispensing of claim 9 wherein said membrane permeation enhancer is lactose and/or one or more water soluble antioxidants.

13. The method of claim 9 wherein said dry micro fine powder compound consist of a plurality of particles which are between approximately 0.1 micrometer and approximately 10 micrometer in size.

14. The method of claim 9 wherein said membrane permeation enhancer is magnesium stearate.

15. The method for dispensing of claim 9 wherein said membrane permeation enhancer is lactose and/or glutathione.

16. A method for improving the effectiveness of S-Adenosylmethionine (SAME) when administered to a human subject, said SAME composition in a dry micro fine powder form, said method comprising the step of directly administering a SAME composition to the subject's respiratory tract in a dry micro fine powder form

17. The method for improving of claim 16, wherein the step further comprising administering to a subject an effective dose of the dry micro fine powder SAME composition with or without lactose, and/or antioxidants via a conventional dry powder inhaler, upon breath activation by the human subject, to deliver said SAME directly into the subject's

respiratory tract, without the use of gas(es), liquids, spray, aerosol(s) or vaporization, in order to enhance prophylactic and therapeutic effects of the SAME.

18. The method of claim 16 wherein said dry micro fine powder composition consist of a plurality of particles which are between approximately 0.1 micrometer and approximately 10 micrometer in size.